Clean Copy of Amended Claim 1

1. (Seven times Amended) Peptide or peptide derivative consisting essentially of:

(a) the amino acid sequence (SEQ ID NO:1)

D-V-N-Y-A-F-L-H-A-T-D-L-L-P-A-C-D-G-E-R,

(b) the amino acid sequence (SEQ ID NO:2)

S-N-M-Y-A-M-M-I-A-R-F-K-M-F-P-E-V-K-E-K,

(c) the amino acid sequence (SEQ ID NO:3)

N-W-E-L-A-D-Q-P-Q-N-L-E-E-I-L-M-H-C-Q-T,

(d) the amino acid sequence (SEQ ID NO:4)

93

T-L-K-Y-A-I-K-T-G-H-P-R-Y-F-N-Q-L-S-T-G,

(e) the amino acid sequence (SEQ ID NO:5)

P-R-Y-F-N-Q-L-S-T-G-L-D-M-V-G-L-A-A-D-W,

(f) the amino acid sequence (SEQ ID NO:6)

T-Y-E-I-A-P-V-F-V-L-L-E-Y-V-T-L-K-K-M-R,

(g) the amino acid sequence (SEQ ID NO:7)

F-F-R-M-V-I-S-N-P-A-A-T-H-Q-D-I-D-F-L-I, wherein the peptide or peptide derivative of SEQ ID NO: 7 comprises a C-terminal isoleucine residue,

(h) a partial region of the amino acid sequence shown in (a), (b), (c), (d), (e), (f) or (g) with a length of at least 6 amino acids, or

(i) an amino acid sequence which has a binding specificity or affinity to human MHC molecules equivalent to the amino acid sequence shown in (a), (b), (c), (d), (e), (f), (g) or (h);

93 wherein said peptide or peptide derivative has a length of up to 25 amino acids, wherein the peptide derivative is a peptide derivatized by a chemical reaction or in which at least one amino acid has been replaced by a naturally occurring or non-naturally occurring amino acid homologue, and wherein specificity indicates a capability of recognizing DR-type MHC class II molecules.

Clean Copy of New Claims

55. (New) The peptide or peptide derivative of claim 1, wherein the peptide derivative comprises a back-bone or amino acid side groups consisting of derivatized amino groups, carboxyl groups and hydroxyl groups.

56. (New) The peptide or peptide derivative of claim 1, wherein the amino acid homologues are 4-hydroxyproline, 5-hydroxylysine, 3-methylhistidine, homoserine, ornithine, ß-alanine or 4-amino butyric acid.

94

57. (New) Peptide or peptide derivative consisting of:

(a) the amino acid sequence (SEQ ID NO:1)

D-V-N-Y-A-F-L-H-A-T-D-L-L-P-A-C-D-G-E-R,

(b) the amino acid sequence (SEQ ID NO:2)

S-N-M-Y-A-M-M-I-A-R-F-K-M-F-P-E-V-K-E-K,

(c) the amino acid sequence (SEQ ID NO:3)

N-W-E-L-A-D-Q-P-Q-N-L-E-E-I-L-M-H-C-Q-T,

(d) the amino acid sequence (SEQ ID NO:4)

T-L-K-Y-A-I-K-T-G-H-P-R-Y-F-N-Q-L-S-T-G,

(e) the amino acid sequence (SEQ ID NO:5)

P-R-Y-F-N-Q-L-S-T-G-L-D-M-V-G-L-A-A-D-W,

(f) the amino acid sequence (SEQ ID NO:6)

T-Y-E-I-A-P-V-F-V-L-L-E-Y-V-T-L-K-K-M-R,

(g) the amino acid sequence (SEQ ID NO:7)

F-F-R-M-V-I-S-N-P-A-A-T-H-Q-D-I-D-F-L-I, wherein the peptide or peptide derivative of SEQ ID NO: 7 comprises a C-terminal isoleucine residue,

(h) a partial region of the amino acid sequence shown in (a), (b), (c), (d), (e), (f) or (g) with a length of at least 6 amino acids, or

(i) an amino acid sequence which has a binding specificity or affinity to human MHC molecules equivalent to the amino acid sequence shown in (a), (b), (c), (d), (e), (f), (g) or (h);

94

wherein said peptide or peptide derivative has a length of up to 25 amino acids, wherein the peptide derivative is a peptide derivatized by a chemical reaction or in which at least one amino acid has been replaced by a naturally occurring or non-naturally occurring amino acid homologue, and wherein specificity indicates a capability of recognizing DR-type MHC class II molecules.

58. (New) The peptide or peptide derivative of claim 1, wherein the DR-type is DR1, DR2, DR4, DR6, or a subtype corresponding thereto.

59. (New) The peptide or peptide derivative of claim 57, wherein the DR-type is DR1, DR2, DR4, DR6, or a subtype corresponding thereto.